**Final Review**

**Unit 1: Chemistry of Life**

|  |  |  |
| --- | --- | --- |
| **Macromolecule** | **Monomer** | **Function** |
| 1. |  |  |
| 2. |  |  |
| 3. |  |  |
| 4. |  |  |

Enzymes:

Macromolecule -

Function –

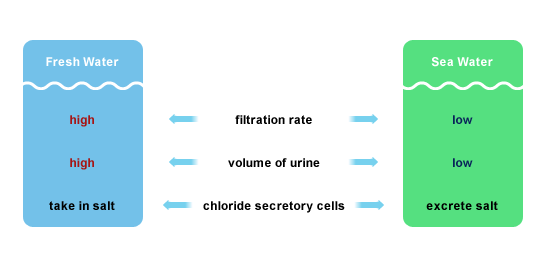
**Unit 2: Cells and Cell Transport**

Draw and label the cell membrane

Define osmosis:

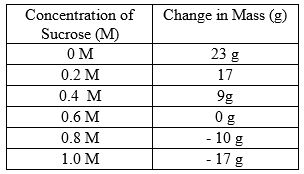
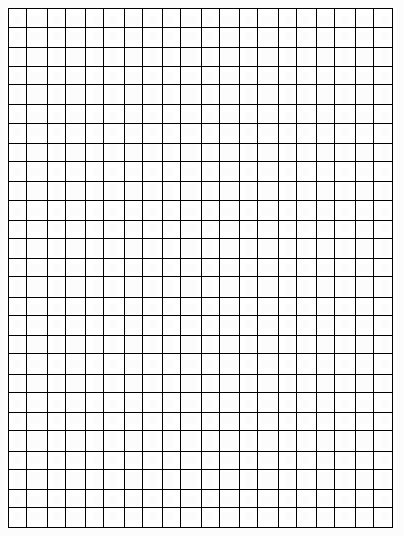
Illustrate:

|  |  |  |
| --- | --- | --- |
| **Hypotonic** | **Isotonic** | **Hypertonic** |

Complete the Table

What affects does drugs have ono the release of signaling molecules?

Graph the data and label each line a hypotonic, hypertonic or isotonic. Summarize what the data says



**Unit 3: Cell Energy**

Write the equations for photosynthesis and cell respiration

List the stages and events included in each stage for photosynthesis and cell respiration

Why do human depend of photosynthesis?

Read the graph and answer the question: What affect does light intensity have on photosynthesis?

**Unit 4: Cell Growth and Division**

Illustrate crossing over and discuss the purpose.

Draw and label the cell cycle:

**Complete the Chart:**

|  |  |  |
| --- | --- | --- |
|  | **Mitosis** | **Meiosis** |
| **Steps** |  |  |
| **Function** |  |  |
| **Occurs in what cells** |  |  |
| **Outcome/results** |  |  |

Define and give an example of differentiation:

**Unit 5: Homeostasis and Body Systems**

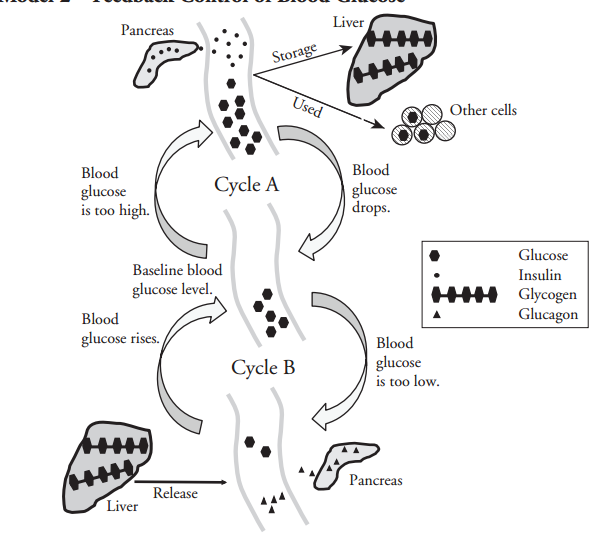
Illustrate and describe the steps of negative feedback loop.

Complete the chart

|  |  |
| --- | --- |
| **Organ System** | **Function** |
| **Nervous** |  |
| **Circulatory/ Cardiovascular** |  |
| **Excretory** |  |
| **Digestive** |  |

Describe how each of the two systems work together to maintain homeostasis.

|  |  |
| --- | --- |
| **Organ Systems** | **Connection** |
| **Circulatory and Nervous** |  |
| **Circulatory and Excretory** |  |
| **Circulatory and Digestive** |  |

Complete the table based on the picture

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | **Stimulus** | **Response** | **Outcome** | **Positive or Negative** |
| **Cycle A** |  |  |  |  |
| **Cycle B** |  |  |  |  |

How do each of the following help maintain homeostasis?

|  |  |
| --- | --- |
| **Cell Transport** |  |
| **Cell Division** |  |
| **Body System Interactions** |  |
| **Cell Energy Systems (cell respiration and photosynthesis)** |  |